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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,849	01/29/2004	Tatsuki Igarashi	248347US3	2357
22850	7590	02/28/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			TRAN, DIEM T	
1940 DUKE STREET			ART UNIT	
ALEXANDRIA, VA 22314			PAPER NUMBER	
			3748	

DATE MAILED: 02/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

10/765,849

Applicant(s)

IGARASHI ET AL.

Examiner

Diem Tran

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

This office action is in response to the amendment filed on 11/24/04. In this amendment, claims 6-17 have been added. Overall, claims 1-17 are pending in this application.

#### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

***Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuenstler et al. (US Patent 6,594,990).***

Regarding claims 1, 2, 6-10, Kuenstler discloses a method for forcibly regenerating a catalytic regeneration type particulate filter (10) in an exhaust pipe through which exhaust gas flows, by adding fuel to the exhaust gas upstream of the particulate filter, the added fuel being oxidized on a flow-through type oxidation catalyst (9) before the particulate filter to produce exothermic heat with which captured and accumulated particulates in the particulate filter are burned off (see col. 4, lines 4-5, col. 5, lines 4-7), thereby forcibly regenerating the particulate filter, the method comprising, in light-load engine operation areas upon forcibly regeneration of the particulate filter, intentionally increasing an engine load by a retarder being adopted as a load adding means and increasing an amount of fuel injected so as to compensate reduced torque due to the increased engine load (see col. 1, lines 60-67, col. 4, lines 21+, col. 6, lines 19-25, 44-54).

Regarding claims 3, 11, Kuenstler further discloses that upon activation of the retarder, with the accelerator pedal retaining its on-state, an entrance temperature of the flow-through type oxidization catalyst is detected and a load on the retarder is feedback-controlled so as to raise a temperature detected up to a target value required for catalytic activity (see col. 1, lines 60-67, col. 4, lines 21+, col. 5, lines 22-30, col. 7, lines 1-6).

Regarding claims 4, 5, 12-15, Kuenstler further discloses that upon activation of the retarder, with the accelerator pedal retaining its on-state, in light-load engine operation areas for forcible regeneration of the particulate filter and when a clutch is off, an intake flow rate is decreased and the amount of fuel injected is increased so as to compensate reduction of the torque (see col. 6, lines 61-67, col. 7, lines 7+).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

***Claims 16, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuenstler et al. (US Patent 6,594,990) in view of Tashiro et al. (US Patent 6,622,480).***

Regarding claims 16, Kuenstler discloses all the claimed limitations as discussed in claim 8 above, however, fails to disclose that filter comprises a particulate filter having a porous honeycomb structure and ceramic material. Tashiro teaches that it is conventional in the art, to utilize a particulate filter having a porous honeycomb structure (see col. 10, lines 27-30).

It would have been obvious for one having ordinary skill in the art, to utilize the teaching of Tashiro in the Kuentler device, since the use thereof would have been routinely utilized by one having ordinary skill in the art.

Regarding claim 17, Tashiro further teaches that said particulate filter has a ceramic material (see col. 10, lines 27-30).

### ***Response to Arguments***

Applicant's arguments filed on 11/11/04 have been fully considered but they are moot in view of a new ground(s) of rejection as set forth above.

### ***Conclusion***

Any inquiry concerning this communication from the examiner should be directed to Examiner Diem Tran whose telephone number is (571) 272-4866. The examiner can normally be reached on Monday -Friday from 8:30 a.m.- 5:00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reached on (571) 272-4859. The fax number for this group is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the

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Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Diem Tran  
Patent Examiner  
Art unit 3748

DT  
February 18, 2005



**THOMAS DENION**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 3700**